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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,877

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EXAMINER

PHAM, TIMOTHY X

ART UNIT

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2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/595,877	Applicant(s) PETERSSON ET AL.	
	Examiner TIMOTHY PHAM	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 21-24 are objected to because of the following informalities: the term “characterised in that the charging logic” should replace with “characterized in that the charging logic”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 recites the limitation "the control of a radio resource managing unit" in line 3 and the limitation "the bandwidth". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 12-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 12-24 are recited a charging logic product where the specification discloses that the charging logic may be implemented using known software means (paragraph [0067]), thus, it is drawn to a “computer program” *per se*, therefore, fail(s) to fall within a statutory category of invention.

A claim directed to a computer program itself is non-statutory because it is not:

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A process occurring as a result of executing the program, or

A machine programmed to operate in accordance with the program, or

A manufacture structurally and functionally interconnected with the program in a manner which enable the program to act as a computer component and realize its functionality, or

A composition of matter.

See MPEP § 2106.01. Data structures not claimed as embodied in computer readable media are descriptive material *per se* and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-10, 12-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Mononen et al. (hereinafter “Mononen”; US 2003/0229595).

Regarding claim 1, Mononen discloses a method for determining charging related to a data bit transfer session (paragraphs [0009], [0016]-[0017], [0048], [0051]), said bit transfer session involving bit transfer over a wireless communications link under the control of a radio resource managing unit (paragraphs [0039], e.g., RRM (Radio Resource Management)), which radio resource managing unit dynamically determines the bandwidth on the wireless link available to the bit transfer session (paragraphs [0069], [0071], [0075], [0078]) the method comprising the steps of:

a charging logic (Fig. 7, reference 140; e.g., billing module) receiving information from the radio resource managing unit about the bandwidth on the wireless link that the bit transfer session is allowed to use (paragraphs [0068]-[0069], [0072], [0079]); and

said charging logic determining the charging related to the bit transfer session based on said received information from the radio resource managing unit (paragraphs [0068]-[0069], [0072], [0079]).

Regarding claim 2, Mononen discloses the method for determining charging according to claim 1 above, further comprising the charging logic receiving said information from the radio

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resource managing unit each time the bandwidth on the wireless link available to the bit transfer session has changed (paragraphs [0039], [0069], [0071], [0075], [0078], e.g., dependent upon the bandwidth required to transmit the content).

Regarding claim 3, Mononen discloses the method for determining charging according to claim 1 above, further comprising the charging logic receiving said information from the radio resource managing unit at predetermined intervals (paragraphs [0017], [0046], e.g., upon receiving information from the operator¹², the user may select the preferred service, and either an amount to be paid or selects a period of time).

Regarding claim 4, Mononen discloses the method for determining charging according to claim 1 above, further comprising the charging logic receiving said information from the radio resource managing unit each time the bandwidth on the wireless link available to the bit transfer session has changed and the bandwidth change has been applied to the session for a predetermined period of time (paragraphs [0042], [0049], [0076], [0078], e.g., paid service is performed, which is in this case was the downloading of 10 minutes of a selected movie).

Regarding claim 5, Mononen discloses the method for determining charging according to claim 1 above, further comprising the charging logic receiving said information from the radio resource managing unit at intervals which depend on the service type of the bit transfer session (paragraphs [0069], [0071], e.g., a price is to be charged to a user of a mobile terminal dependent upon the bandwidth required to transmit the content).

Regarding claim 6, Mononen discloses the method for determining charging according to claim 1 above, further comprising the charging logic receiving said information from the radio

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resource managing unit via an application server which relays said information from the radio resource managing unit to the charging logic (paragraph [0042]).

Regarding claim 7, Mononen discloses the method for determining charging according to claim 1 above, further comprising the charging logic receiving said information from the radio resource managing unit via a mobile proxy which relays said information from the radio resource managing unit to the charging logic (Fig. 7, references 112 and 118; paragraphs [0022], [0068]-[0069], [0071]-[0072]).

Regarding claim 8, Mononen discloses the method for determining charging according to claim 1 above, further comprising the charging logic adapting the charging related to the bit transfer session such that the session is charged according to charging rates associated with a first charging class when the bandwidth on the wireless link available to the bit transfer session is within a first predetermined interval (paragraphs [0042], [0045]-[0046], [0051], e.g., CASE1 option) and according to charging rates associated with a second charging class when the bandwidth on the wireless link available to the bit transfer session is within a second predetermined interval (paragraphs [0042], [0045]-[0046], [0051], e.g., CASE2 option).

Regarding claim 9, Mononen discloses the method for determining charging according to claim 1 above, further comprising the charging logic determining that the charging related to the bit transfer session should be zero when the bandwidth on the wireless link available to the bit transfer session is below a predetermined threshold level (Fig. 8; paragraph [0080], e.g., the linear function of the number of bytes on the X axis transferred over the wireless link and the minimum price of charge when no pictures).

Regarding claim 10, Mononen discloses the method for determining charging according to claim 1 above, further comprising the charging logic adapting the charging related to the bit transfer session based on said received information from the radio resource managing unit such that the impact of said received information from the radio resource managing unit on the charging of the bit transfer session depends on the type of service of the bit transfer session (paragraphs [0042], [0045]-[0046], [0067], [0071], [0073]).

Regarding claim 12, Mononen discloses a charging logic incorporated for use in a telecommunications charging system for determining charging related to a data bit transfer session (Fig. 7, reference 140; e.g., billing module), said bit transfer session involving bit transfer over a wireless communications link under the control of a radio resource managing unit (paragraphs [0039], e.g., RRM (Radio Resource Management)), which radio resource managing unit dynamically determines the bandwidth on the wireless link available for the bit transfer session (paragraphs [0069], [0071], [0075], [0078]), the charging logic comprising

reception means for receiving information from the radio resource managing unit about the bandwidth on the wireless link available for the bit transfer session (paragraphs [0068]-[0069], [0072], [0079]); and

charging determining means for determining the charging related to the bit transfer session based on said received information from the radio resource managing unit (paragraphs [0068]-[0069], [0072], [0079]).

Claim 13 is rejected with the same reasons set forth in claim 2.

Claim 14 is rejected with the same reasons set forth in claim 3.

Claim 15 is rejected with the same reasons set forth in claim 4.

Claim 16 is rejected with the same reasons set forth in claim 5.

Claim 17 is rejected with the same reasons set forth in claim 6.

Claim 18 is rejected with the same reasons set forth in claim 7.

Claim 19 is rejected with the same reasons set forth in claim 8.

Claim 20 is rejected with the same reasons set forth in claim 9.

Regarding claim 21, Mononen discloses the charging logic according to claim 12 above, characterized in that the charging logic is incorporated in a proxy node which further incorporates a mobile proxy (paragraphs [0068]-[0069], [0072]-[0074], e.g., a content proxy 110).

Regarding claim 22, Mononen discloses the charging logic according to claim 12 above, characterized in that the charging logic is incorporated in an application/service node which further incorporates an application logic (paragraphs [0064]-[0065]).

Regarding claim 23, Mononen discloses the charging logic according to claim 12 above, characterized in that the charging logic is incorporated in a charging node, which is a node dedicated to charging functionality (paragraph [0069], [0072]-[0073]).

Claim 24 is rejected with the same reasons set forth in claim 10.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY PHAM whose telephone number is (571)270-7115. The examiner can normally be reached on Monday-Friday; 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571-272-7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ Timothy Pham/
Examiner, Art Unit 2617

/VINCENT P. HARPER/
Supervisory Patent Examiner, Art Unit
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